

CLAIMS

Claims 1 through 45. (Cancelled)

46. (Currently amended) ~~A method according to Claim 45,~~ A method of embedding a watermark signal comprising a series of watermark values in a picture signal comprising a series of picture sample values, the method comprising adjusting picture sample values based on watermark values wherein the watermark is derived from a combination of a number of substantially independent watermarks or wherein a number of substantially independent watermarks are embedded in each picture wherein said substantially independent watermarks satisfy the following criteria:-

- (1) $w_1^2 = \dots = w_N^2 = 1$
- (2) $E[w_1] = \dots = E[w_N] = 0$, where E is the expectation operator
- (3) $E[w_k \cdot w_n] = 0$ if $k \neq n$.

47. (Currently amended) A method according to Claim [[45]] 46, wherein said number of substantially independent watermarks comprises a subset selected from a defined set of substantially independent watermarks.

48. (Original) A method according to Claim 47, wherein said number is three.

49. (Currently amended) A method according to Claim [[48]] 47, wherein there are more than three substantially independent watermarks in said set.

50. (Currently amended) A method according to Claim [[45]] 46, wherein the subset is selected or said substantially independent watermarks are selected in dependence on information to be encoded in the picture.

51. (Currently amended) A method according to Claim [[45]] 46, wherein three bipolar watermarks are combined to produce a single bipolar watermark with the property that the product of the combined watermark with each of the constituent marks has an expectation value of $\frac{1}{2}$.

Claims 52 through 81. (Cancelled)

82. (New) A method according to Claim 46 including generating the watermark by convolving a key with a repeated data sequence to produce a data-carrying watermark.

83. (New) A method according to Claim 46, wherein the picture is divided into two or more sub-pictures, and a substantially independent watermark is embedded into each sub-picture.